

Attorney Docket No.: **PTQ-0058**
Inventors: **Van Eyk et al.**
Serial No.: **10/824,027**
Filing Date: **April 14, 2004**
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This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of the claims:

Claim 1: (currently amended) A method for identifying an agent or event capable of priming a cell for preconditioning and/or inducing preconditioning of a cell, tissue or organ comprising assessing the ability of the agent or event to modulate a preconditioning protein in a cell, tissue or organ by detecting a modulation in the preconditioning protein in the presence of the agent or event as compared to the preconditioning protein in the absence of the agent or event, wherein the preconditioning protein is a protein of an oxidative phosphorylation (OxPhos) pathway, tricarboxylic acid (TCA) cycle, a Ca^{2+} handling protein, a chaperone protein, or a protein selected from aldehyde dehydrogenase, NG-dimethylarginine dimethylaminohydrolase (DDAH) and the RNA binding protein regulatory subunit DJ-1.

Claim 2-12: (canceled)

Claim 13: (previously presented) The method of claim 1 wherein the agent or event identified modulates the

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preconditioning protein in the cell, tissue or organ and leads to a change via cross-talking, a feed-back mechanism or a signaling mechanism which effects the first window of preconditioning, the second window of preconditioning or both windows of preconditioning of a cell.

Claim 14: (currently amended) The method of claim 1 wherein the agent or event identified modulates the preconditioning protein in the cell, tissue or organ and leads to a change in function of the a protein complex or pathway of which the modified protein is a member.

Claim 15: (previously presented) The method of claim 1 wherein the agent or event identified modifies a mitochondrial protein.

Claim 16: (previously presented) The method of claim 1 wherein the agent or event identified increases a level of one or more of IDH, succinyl CoA ligase, a 23 kDa mitochondrial precursor subunit of Complex I, a 24 kDa mitochondrial precursor subunit of Complex I, a 30 kDa mitochondrial precursor subunit of Complex I, a δ chain mitochondrial precursor of an F₁ portion, a d chain

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mitochondrial precursor of a F₀ portion of Complex V, prohibitin, ADP ribosyl hydrolase, HSP27 and RNA binding protein regulatory subunit (DJ-1).

Claim 17: (previously presented) The method of claim 1 wherein the agent or event identified decreases a level of one or more of dihydrolipoamide succinyltransferase, core protein I of Complex III, metaxin 2 and sarcalumenin.

Claim 18: (previously presented) The method of claim 1 wherein the agent or event identified changes a level of DDAH.

Claim 19: (previously presented) The method of claim 1 wherein the agent or event identified increases post-translational modification of β chain mitochondrial precursor of the F₁ portion of Complex V, protein X, or aconitate hydratase (aconitase).

Claim 20: (previously presented) The method of claim 1 wherein the agent or event mimics modulation of the preconditioning proteins by adenosine or diazoxide.